Free Training Transcript: Using the Filter Shelf

Welcome to this video on Using the Filter Shelf. You can download the Exercises workbook to follow along in your own copy of Tableau.

Let's say we're looking at this breakdown of our sales data, and we want to filter based on Market. We can drag the Market field from the data pane to the filter shelf, select how we want to filter, maybe we want to exclude our domestic market, USCA. We'll clear everything else, select exclude, and choose what we don't want. That's it! We've filtered our view.

But let's look into this a bit more deeply. If we right click on that field on the filter shelf and click Edit Filter, we can bring the dialog back up. This is actually a very powerful window, let's go through some of the features.

Pill Types and Filtering

Note that the options presented when filtering varies by pill type. For a full explanation on pill types and their impact, see the Pill Type video in the "Why is Tableau Doing That" section.

Filtering Discrete Dimensions

This is the dialog we get when we're filtering on a discrete dimension. The first tab, General, lists the values in the field we're filtering on. We can select All or None with these buttons, and we can either choose what we want, or, using exclude, chose what we don't want. If the list is very long, even search, like so. Use All can be a useful option if the list of members in this field may change and we want to ensure that we're always including every member as an input to the filter. Wildcard lets us filter very specifically, maybe this field is email addresses and we want to exclude our company's domain, by saying exclude, then choosing does not end and entering @tableau.com, this would filter out our employees.

Condition lets us filter based on another field. First, let's cancel this and instead filter on Product Name, as this illustrates the concept a bit better. For example, let's say we only want our view to only include products whose average quantity sold is greater than 1. We can do that on the Condition tab, by setting the field to quantity, changing the aggregation to average, the comparison to greater than and entering 1. If we wanted to make sure that this condition makes sense, Load brings in the range of values for that field so we can see what we're working with. The Condition tab can also accommodate

calculations, here "by formula". If you're familiar with SQL, Condition is like adding a HAVING clause to the WHERE.

Top also lets us filter based on another field. And we can choose to filter top or bottom. If Top filtering is giving you unexpected results, check out the video Filtering for Top and Top N. Filtering can be made more dynamic using parameters instead of constants for these conditions. There's a video on Parameters with more information about creating and using Parameters. That's filtering discrete dimensions.

Filtering Measures or Continuous Dimensions

When we bring a Measure like Shipping Cost to the filter shelf, we get a different dialog window. If our field is a Measure specifically, first, we're offered the Filter Field and asked to specify a level of aggregation. For a discussion on aggregate versus record level filtering, please see the video "Where Tableau Filters". For now, we'll click All values, which is record level filtering, and now we're brought to our options for all quantitative filters.

Range of values lets us select an upper and lower cutoff. The prefilled limits are based on what's in the data source – and how our view is built. Let's see what that means. Here, our view contains Furniture for the LATAM market. We see our Shipping Cost ranges from about $1 to $810. If we change this option, Show, from "Only Relevant Values" to "All Values in Database", we'll see that we have some products whose shipping costs who range up to $933. At Least & At Most are useful options if you only need to specify a lower or upper limit. Let's take a look at another example. Right click on the pill on the filter shelf to see how the filter is set up. Here we have a filter on Profit, and the lower range is set to 0 to filter out unprofitable marks. If we click OK, we'll see how that looks in the interactive filter. But watch what happens if we roll up to Product Category. We've inadvertently locked our upper range as well, and we filtered out two more profitable Categories! Let's go back into that filter and here we see that trimming. We should actually use "At Least" zero, as this allows our upper range to fluctuate as we adjust the view. Lastly for quantitative filters, we have an option for Special – this helps us filter on nulls. That's filtering quantitative data!

Filtering Continuous Dates

Dates deserve their own mention with filtering. When a date field, as identified by this calendar icon, is brought to the filter shelf, we're given a Filter Field just like with a

Measure and asked to specify how we want to filter the date. A discrete date is treated like a dimension, and there are specific discrete date parts listed here. Note that they're blue.

Continuous dates, however, have their own date specific options. Here we can pick range of dates or relative date. These will bring us to the options for continuous dates. Relative dates let us set a specific unit of time. Maybe we'd like to look at the last 2 years. We can set ranges, including something like week to date. By default the filter is anchored to today, which is dynamic, but we can change it to a static date. Range of dates, starting, and ending are similar to measures, but with calendar date pickers. The interactive filter for a continuous date comes up as a range, we can use the slider, or click on the date to bring up a calendar picker or type in a date. Ranges are inclusive – the data for boundary dates will be shown.

Conclusion

That's an in-depth review of the filter shelf and its options. There's a lot of other information about filtering, and we invite you to explore the free training videos to learn more.